

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on March 18, 2010 has been entered.

Claim 2 had been cancelled.

Claims 9-12, 14-45 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-4, and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Barth et al.

It is believed that the general pertinence of the reference is readily apparent. Barth et al manifold 114 includes Kapton sheet 116 and adhesive layers 126, 130, fluid channel 140, and electric leads 164, 166 for connection to the ejection means 110 either of which can be read as an electronic control system.

Applicant's arguments have been fully considered but they are not persuasive. Applicant argues against Barth et al for channel 140 not extending "an entire length of the platform" (emphasis added). However, the claims do not require channel 140, or the electrofluidic component, to extend the entire length of the platform, whatever "an entire

length" might be construed to mean. The claims recite that the system (emphasis added) extends an entire length of the platform. Channel 140 is part of the system of Barth et al; whether channel 140 extends the entire length is irrelevant to the allowability of the claims. The length of the system of Barth et al is fairly read as an entire length of the platform, and the rejection will be maintained.

Claims 1, 3-8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barth et al in view of Biegelsen et al.

Barth et al show the claimed device except for some details. Biegelsen et al show a microvalve with electric connections formed on the lamination for controlling the valve, and broadly disclose multiple embedded fluidic components and the use of known circuit board manufacturing techniques for MEMS devices. It would have been obvious for one of ordinary skill in the art at the time the invention was made to have used such electric connections formed on the lamination layers as taught by Biegelsen et al with the system of Barth et al under the rationale set forth in *KSR v. Teleflex*, 550 U.S. \_\_\_, 127 S. Ct. 1727, 82 U.S.P.Q.2d 1385 (2007) that the simple substitution of one known element for another to obtain predictable results is obvious.

The use of a commercially available resin, R/FLEX, is considered an obvious matter of choice, as is the deposition depth. The recitation of "etched" in claim 7 relates to a method of manufacture and is not given weight in the apparatus claim. As to claim 8, the step of not bonding areas that are not supposed to be bonded is considered an obvious expedient.

Applicant's arguments are limited to Barth et al, which arguments have been rebutted. Therefore this rejection will be maintained.

All claims are drawn to the same invention claimed in the application prior to the entry of the submission under 37 CFR 1.114 and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the application prior to entry under 37 CFR 1.114. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action after the filing of a request for continued examination and the submission under 37 CFR 1.114. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Fox whose telephone number is 571-272-4912. The examiner can normally be reached on Monday-Saturday from 10am-6pm (Hoteling Program).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robin Evans can be reached on 571-272-4777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Fox/  
Primary Examiner  
Art Unit 3753